

# LABORATORY MICROSCOPES 2015







#### Dear Customers,

Herewith we take the opportunity to introduce our range of quality microscopes to you. The products shown in this brochureare suitable for a great variety of applications (e.g. Education, Life Sciences and Material Sciences). Our products will meetany specific requirement – and budget as well!

Our commitment to quality is the basic principle reflected in all workflow procedures. Our quality assurance is covering theentire production process with a meticulous final inspection. This assures that you get a product of excellent quality. All products we supply conform to the different international standards (e.g. CE Declaration of Conformity for the microscopes is self-explanatory).

Next to microscopes we are able to provide you with high-quality lab equipment related to routine as well as specific laboratory work. Since 1960 we are a reliable partner and qualified distributor in this field. Our knowledge and experiencegained over this long period of time turns out to be your advantage in order to procure the right equipment for your needs.









Do not hesitate to ask for our General Catalogue 15 (for trading items), or the special brochures about IRMECO Fume Cupboards, IRMECO Viscometers, or the IRMECO general product brochure (incl. Ovens, Incubators, Cooled Incubators, Refrigerators, Climatic Chambers, etc.)



We are an ISO certified company.

### Overview



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### Microscope Series IM-910



Model IM-910 B

The Modern Laboratory Biological Microscope with maximum operating comfort and enhanced rigidity; for wide range applications from routine clinical work to educational use; with the convenience of extra bright LED illumination.

Head: Siedentopf Binocular head, 30° inclined, 360° rotatable, interpupillary

distance 50-75 mm, with diopter adjustment

Stand: Ergonomically designed, comfortable low position coaxial coarse, fine focusing

controls, adjustable tension control. Easily adjustable focus stop allows for rapid

image focusing while protecting specimens and objectives

Stage: Double-plate mechanical stage

145x140 mm with vernier scales. Travel area 76x50 mm, with low position control, specimen holder

Focusing: Coaxial coarse & fine focus adjustment,

focusing range 26 mm (precision 0.002 mm)

Condenser: Centerable N.A. 1.25 Abbe condenser with

iris diaphragm and filter holder

Eyepiece: WF10x/18mm (for IM-910 B and IM-910 T only);

WF10x/20mm for all other models

Objectives: DIN standard achromatic, magnification 4x,

10x, 40x, 100x (0il)

Illumination: Ultra-high brightness LED cold light with

brightness control

### Optional Accessories:

Eyepieces: WF10x/18mm, WF10x/20mm, WF16x/13mm

Objectives: Plan Achromatic (20x, and 60x)

Infinite EPlan Achromatic 20x Phase-Contrast Attachment

CMOS digital eyepieces 3 MegaPixel or higher Lens adapters & holders for digital camera

connection (e.g. CANON)



### Microscope Series IM-910



IM-910 B Same as above mentioned

IM-910 BP Same as above mentioned, but equipped with plan achromatic objectives

IM-910 BI Same as above mentioned, but equipped with Infinite

EPlan Achromatic objectives

IM-910 T Same as above mentioned, but equipped

with trinocular head

IM-910 TP Same as above mentioned, but equipped with

trinocular head and plan achromatic objectives

IM-910 TI Same as above mentioned,

but equipped with trinocular head and Infinite EPlan Achromatic

objectives

IM-910 series is also available with Integrated Digital head:

IM-910 DP Same as IM-910 BP but with Integrated Digital Head

(3 MegaPixel), for digitalising your observation and streaming real-time images 2048x1536 on your PC (via USB 2.0), software included

(on CD-ROM)

IM-910 DI Same as IM-910 D, but with Infinite EPlan

Achromatic objectives

tal Head on

IM-910 BP IM-910 BI IM-910 T IM-910 TP IM-910 B IM-910 TI Siedentopf Binocular Head (30°, inclined Siedentopf Trinocular Head (30°, inclined) Eyepiece WF10x/18 mm WF10x/20 mm Nosepiece Quadruple nosepiece Achromatic 4x, 10x, 40x(S), 100x(S) Plan Achromatic 4x, 10x, 40x(S), 100x(S) Infinite EPlan Achromatic 4x, 10x, 40x(S), 100x(S) Stage 145 x 140 mm mechanical stage Moving Range 76 x 50 mm Condenser Abbe N.A. 1.25 with Iris Diaphragm Coaxial coarse and fine focusing controls Focusing llumination Koehler System Ultra-Brightness LED cold light

### Microscope Series IM-660



Model IM-660 BI

The Professional Biological Microscope for teaching purpose at laboratory level; innovative and safe design for adaptability and stability; equipped with universal infinity-corrected optical system (UIS) paired with extra bright LED illumination.

Head: Siedentopf Binocular head,

360° rotatable, interpupillary distance 54-75 mm, with diopter adjustment

Optical System: Universal infinity color corrected optical system

Stand: Ergonomically designed, comfortable low position coaxial coarse, fine focusing controls,

> adjustable tension control. Easily adjustable focus stop allows for rapid image focusing while protecting specimens and objectives. It is equipped with a comfortable handgrip.

Double-layered large mechanical stage 140 x 132 mm with single slide clip. Stage:

Travel area 76 x 50 mm, with low position control, specimen holder

Focusing: Coaxial coarse & fine focus adjustment (precision 0.002 mm)

Condenser: Centerable N.A. 1.25 Abbe

condenser with iris diaphragm

and filter holder

Eyepiece: PL10x/18mm

Infinity Plan achromatic, magnification Objectives:

4x, 10x, 40x, 100x (Oil)

Illumination: Koehler illumination with ultra-high brightness

LED cold light with brightness control

IM-660 BI Same as above mentioned

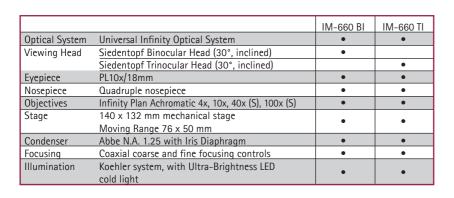
IM-660 TI Same as above mentioned,

but with trinocular head

#### **Optional Accessories:**

CMOS digital eyepieces 5 MegaPixel or higher PL15x/13mm eyepiece with diopter adjustment Infinity Plan Achromatic Objectives: 20x, 60x Phase Contrast Slide Kit

Lens adapters & holders for digital camera connection (e.g. CANON)



### Microscope Series IM-890



Model IM-890 B

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The Modern Laboratory Biological Microscope with maximum operating comfort; specifically for educational use; with the convenience of extra bright LED illumination.

Optical System: Finite color corrected optical system

Siedentopf head, 30° inclined, 360° rotatable, interpupillary, Head:

distance 50-75 mm, with diopter adjustment

Stand: Ergonomically designed, comfortable low position coaxial coarse, fine focusing controls,

> adjustable tension control. Easily adjustable focus stop allows for rapid image focusing while protecting specimens and objectives; equipped with a comfortable handgrip.

Double-layered mechanical stage 132x140 mm with vernier scales. Stage:

Travel area 50x76 mm, precision 0.1 mm

Focusing: Coaxial coarse & fine focus adjustment (precision 0.002 mm)

Condenser: N.A. 1.25 Abbe condenser with

iris diaphragm

Widefield plan eyepiece 10x/18mm Eyepiece:

with/without recticle

Achromatic objectives, magnification Objectives:

4x, 10x, 40x, 100x (Oil)

Illumination: Ultra-high brightness LED 3W cold light with

brightness control

IM-890 M Same as above mentioned, with monocular head

IM-890 B Same as above mentioned, with binocular head

IM-890 T Same as above mentioned, with trinocular head

#### **Optional Accessories:**

CMOS digital eyepieces 3 MegaPixel or higher Filters for transmitted light: blue/yellow/green



		IM-890 M	IM-890 B	IM-890 T
Optical System	Finite color corrected optical system	•	•	•
Viewing Head	Monocular Head	•		
	Binocular Head		•	
	Trinocular Head			•
Eyepiece	PL10x/18mm	•	•	•
Nosepiece	Quadruple nosepiece	•	•	•
Objectives	Achromatic 4x, 10x, 40x(S), 100x(S)	•	•	•
Stage	132 x 140 mm mechanical stage Moving Range 50 x 76 mm	•	•	•
Condenser	N.A. 1.25 Abbe Condenser with Iris diaphragm and filter	•	•	•
Focusing	Coarse and fine focus adjustment	•	•	•
Illumination	3W LED	•	•	•

### Microscope Series IM-400



Model IM-450 TI

The High Performance Laboratory Biological Microscope with maximum operating comfort and enhanced rigidity; for routine work designed specially to enhance operational convenience by combining innovative design and high performance optics. Extra clarity and contrast is provided through the high performance colour corrected infinity optical system. From dark field to phase contrast to fluorescence microscopy, the IM-400 is well suited for a wide variety of applications in Advanced Education, Medical and Veterinary Diagnostic Medicine.

Head: Siedentopf Binocular head, 30° inclined, 360° rotatable, interpupillary

distance 50-75 mm, with diopter adjustment

Optical System: Infinity Optical System

Stand: Ergonomically designed,

comfortable low position coaxial coarse, fine focusing controls, adjustable tension

control.

Stage: Double-plate mechanical stage 190x140 mm with vernier scales. Travel area 78x55 mm,

with low position control

Focusing: Coaxial coarse & fine focus adjustment

Condenser: Centerable N.A. 1.25 Abbe condenser

with iris diaphragm and filter holder

Eyepiece: WF10x/20mm

Objectives: Infinity Plan achromatic,

magnification 4x, 10x, 40x, 100x (Oil)

Illumination: Ultra-high brightness

### Optional Accessories:

Eyepieces WF16x/13mm
Infinity Plan achromatic Objective 20x
Simple Polarization Set
Single Phase Contrast Set 40x
Turret Phase-Contrast Set attachment Ph

Turret Phase-Contrast Set attachment PH10x, PH20x, PH40x, PH100x Epi-Fluorescence attachment (Blue & Green filter with 100W HB0 mercury lamp)

CMOS digital eyepieces 3 MegaPixel or higher

Lens adapters & holders for digital camera connection (e.g. CANON)

		IM-400 I	IM-400 TI	IM-450 I	IM-450 TI
Optical System	Infinity Optical System	•	•	•	•
Viewing Head	Siedentopf Binocular Head (30°, inclined)	•		•	
	Siedentopf Trinocular Head (30°, inclined)		•		•
Eyepiece	WF10x/20 mm	•	•	•	•
Nosepiece	Quadruple nosepiece	•	•		
	Quintuple nosepiece			•	•
Objectives	Infinity Plan 4x, 10x, 40x (S), 100x (S)	•	•		
	Infinity Plan 4x, 10x, 20x, 40x (S), 100x (S)			•	•
Stage	190 x 140 mm mechanical stage				
	Moving Range 78 x 55 mm	_	_ •		•
Condenser	Abbe N.A. 1.25 with Iris Diaphragm	•	•	•	•
Focusing	Coaxial coarse and fine focusing controls	•	•	•	•
Illumination	Ultra-Brightness LED cold light	•	•	•	•

### IM-400 I

Same as above mentioned

#### IM-450 I

Same as above mentioned, but equipped with quintuple nosepiece with 5 objectives Infinity Plan Achromatic, 4x, 10x, 20x, 40x, 100x (0il)

#### IM-400 TI

Same as above mentioned, but with trinocular head

#### IM-450 TI

Same as above mentioned, but with trinocular head and quintuple nosepiece with 5 objectives

### Microscope Series IM-800

IBMECO

Model IM-800 B

This Microscope Series – in the classical design – is perfectly suited for educational purposes.

Head: Monocular head, 45° inclined, 360° rotatable

Stand: Ergonomically designed, comfortable low position coaxial coarse, fine focusing controls

Stage: Mechanical stage 120 x 120 mm, travel area 80 x 30 mm

Condenser: N.A. 1.25 Abbe condenser with iris diaphragm and filter holder

Eyepiece: WF10x/18 mm

Objectives: DIN standard achromatic,

magnification 4x, 10x, 40x (S),

100x (S)

Illumination: Built-in high-intensity

6 Volt 20 Watt halogen illuminator, adjustable brightness

IM-800 M Same as above mentioned

IM-800 B Same as above mentioned,

but with 30° inclined,

binocular-head with interpupillary distance 55-75 mm, diopter adjustment

IM-800 DH Same as above mentioned, but with dual-viewing head

(see picture below)



		IM-800 M	IM-800 B	IM-800 DH
Viewing Head	Monocular Head (45°, inclined), 360° rotatable	•		
	Binocular Head (30°, inclined), 360° rotatable		•	
	Dual-Viewing head			•
Eyepiece	WF10x/18 mm	•	•	•
Nosepiece	Quadruple nosepiece	•	•	•
Objectives DIN	Achromatic 4x, 10x, 40x, 100x(oil)	•	•	•
Stage	120 x 120 mm mechanical stage			
	Moving Range 80 x 30 mm			<u> </u>
Condenser	N.A. 1.25 Abbe Condenser			
	with iris diaphragm and filter		•	_
Focusing	Coarse and fine focus adjustment	•	•	•
Illumination	6V 20W Halogen lamp	•	•	•

### Optional Accessories

CMOS digital eyepieces 3 MegaPixel or higherEyepiece WF15x/13 mm, WF20x/10 mm Polarization Set (simple)

### Inverted Microscope Series IM-5050



### Inverted Microscope Series IM-5050



This Inverted Biological Microscope looks at the challenge of the future with confidence, offering first-class completeness, optical quality, mechanical versatility.

It is open for all the enhancements and accessories that will be developed throughout the years.

Head: Siedentopf Trinocular head, 45° inclined, interpupillary distance 54-75 mm, with diopter adjustment

eyepoint height is 400 mm for easy and comfortable viewing

Nosepiece: Easy-to-rotate quintuple (5 positions) backward-facing nosepiece, ample space around the nosepiece

suitable even for operators with large or gloved hands.

Stage: Plan stage, 160 x 250 mm

Focusing: Coaxial coarse & fine focus adjustment

Condenser: Ultra-long working distance condenser (N.A. 0.3, WD72 mm)

Eyepiece: PL10x/22mm, center eyepiece

Objectives: LWD Infinite System (corrected for 1.2 mm glass covers):

LWD Plan 4x/0.10 WD22mm LWD Plan 10x/0.25 WD7.94 mm LWD Plan 40x/0.60 WD3.71 mm

LWD Phase Contrast 20x/0.40 WD 7.66 mm

Filter: brightness colour filter, temperature transition colour filter

Illumination: 6V30W Halogen bulb or LED (your choice; same price)

IM-5050 Same as above mentioned

IM-5050-A Same as above mentioned, but equipped with Swing-out

N.A. 0.3, WD72 mm condenser (Koehler Illumination)

IM-5050-PH Same as above mentioned, but equipped with LWD Plan 4x,

LWD Phase Contrast 10x, 20x, 40x objectives

IM-5050-A-PH Same as above mentioned, but equipped with Swing-out

N.A. 0.3, WD72 mm condenser (Koehler Illumination) and LWD Plan 4x, LWD Phase Contrast 10x, 20x, 40x objectives

#### **Optional Accessories:**

Eyepiece PL10x/22 mm with Cross Line, PL15x/16 mm
Objective LWD Plan 20x/0.40 WD7.66 mm
Objective LWD Plan 60x/0.70 WD2.50 mm
Objective LWD Phase Contrast 10x/0.25 WD 7.94 mm
Objective LWD Phase Contrast 40x/0.60 WD 3.71 mm
Variety of color filters
Mechanical stage, X-Y movement 120 mm x 78 mm,
Extended stage, Slide holder, Terasaki holder, Petri Dish holder
Fluorescence attachment with 100W Mercury lamp
CCD adapter (1/2)





Model IM-5050

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		IM-5050	IM-5050-A	IM-5050-PH	IM-5050-A-PH
	PL10x/22mm	•	•	•	•
Eyepiece	PL10x/22mm with cross line				
	PL15x/16mm				
	Center eyepiece	•	•	•	•
	LWD Plan 4x/0.10 WD 22 mm	•	•	•	•
	LWD Plan 10x/0.25 WD 7.94 mm	•	•		
	LWD Plan 20x/0.40 WD 7.66 mm				
M/D Ohiaati	LWD Plan 40x/0.60 WD 3.71 mm	•	•		
WD Objective	LWD Plan 60x/0.70 WD 2.50 mm				
nfinite System	LWD Phase Contrast Contrast 10x/0.25 WD 7.94 mm			•	•
	LWD Phase Contrast Contrast 20x/0.40 WD 7.66 mm	•	•	•	•
	LWD Phase Contrast Contrast 40x/0.60 WD 3.71 mm			•	•
/iewing head	Trinocular head, interpupillary distance 54-75mm	•	•	•	•
	N.A. 0.3, WD 72 mm	•		•	
Condenser	Swing out N.A. 0.3, WD72 mm (with Koehler Illumin.)		•		•
	Swing out N.A. 0.5, WD28 mm (with Koehler Illumin.)				
	Quintuple nosepiece	•	•	•	•
	Plan Stage (size 160 x 250 mm)	•	•	•	•
Main Body	6V30W Halogen, Input 90V-240V	•	•	•	•
•	adjustable phase center 10x/20x, 40x, bright field	•	•	•	•
	phase center pre-setting 10x/20x, 40x, bright field				
	brightness colour filter	•	•	•	•
Color filter	monochrome contrast color filter				
olor filter	temperature transition color filter	•	•	•	•
	IR-eliminating colour filter				
	Mechanical stage, X-Y movement, 120 x 78 mm				
	Extended stage				
Other parts	Cultural vessel, diam. 35 mm	•	•	•	•
	Slide holder				
	Terasaki holder				
	Petri dish holder				
	CCD adapter (1/2)				

### Stereomicroscope Series IM-SZ 550



This professional & modern microscope series in compact design is equipped with the Greenough Optical System (for excellent image flatness with large depth of field). Clear, sharp image reproduction is matched by new ergonomic design elements which maximize comfort and ease of use.

Features: Viewing head: 45° inclined, 360° rotatable binocular head or trinocular head,

inter-pupillary distance adjustable between 54-75mm; both diopter adjustment

of range +/-4.5mm.

Eyepiece: High-eyepoint eyepiece; it can observe image of

observation specimen with glasses.

Objective: Zoom objective magnification 0.67x - 4.5x

Zoom ratio: 6.7 : 1

Magnification range: between 3.35x – 180x

(using optional auxiliary objectives)

Working distance: 100 mm, special maximum working

distance can provide more working

space for you

Illumination: Built-in and built-out illumination system.



### Magnification Table

Zoom Magnification	WF10x/22		WF15x/16		WF20x/12	
	Total Magnification	Field of view (mm)	Total Magnification	Field of view (mm)	Total Magnification	Field of view (mm)
0.67x	6.7	32.8	10.1	23.9	13.4	17.9
1x	10	22	15	16	20	12
2x	20	11	30	8	40	6
3x	30	7.3	45	5.3	60	4
4.5x	45	4.9	67.5	3.6	90	2.6

### Stereomicroscope Series IM-SZ 550

IBMECO

IM-SZ 550-B ST5-H

Heads:

SZ550-B: 45° inclined, 360° rotatable binocular head

WF10x/22 eyepiece, high-eyepoint eyepiece zoom objective magnification 0.67 – 4.5x

Magnification 6.7x – 45x or 3.35 – 180x (with auxiliary objectives)

Inter pupillary distance 55 – 75 mm

Diopter range: +/- 4.5 mm

SZ550-T: same as above, but with trinocular head

Stands:

ST1: Pillar Stand, pillar size 32 mm,

stage 100 mm diam. Black & white plate

ST5: Pillar Stand with incident and transmitted light (LED) with intensity light control,

pillar size 32 mm, stage 100 mm diam. glass

ST5-H: Pillar Stand with special LED illumination

for extreme brightness, incident LED illumination ring (with 60 LEDs), and transmitted illumination ring (with 92 LEDs), with intensity light control, pillar size 32 mm, stage 100 mm diam. glass



(LED illumination ring from stand ST5-H)



#### Optional Accessories

Auxiliary Objectives: 0.5x, 0.75x, 1.5x, 2.0x (to expand magnification from 3.35x - 180x)

Eyepieces: WF15x/16, WF20x/12, WF25/9, WF30/8

Lens adapters & holders for digital camera connection (e.g. CANON)

CMOS digital eyepieces 5 MegaPixel or higher

### Stereomicroscope Series IM-S 350 & IM-SZ 350



Innovation in illumination, optical and mechanical design make the SZ-350 series the premier choice in dissection as well as routine inspection microscope for those who demand superior value.

Head: binocular head, 45° inclined, rotatable, with diopter adjustment 50-76 mm on both tubes

incident and transmitted adjustable LED Illumination:

Objectives: Zoom 0.7x - 5.5x (for "SZ" series)

2x and 4x in revolver (for "S" series)

Magnification: 7 - 55x (for "SZ" series)

20x and 40x (for "S" series)

Working distance: 100 mm

Eyepiece: WF10x/20mm with high point

Focusing mechanism: focusing knobs with tension

IM-S 350 Same as above mentioned,

with 2x and 4x revolver objective

IM-SZ 350 Same as above mentioned,

with Zoom Objective

IM-S 350-T Same as above mentioned,

with 2x and 4x revolver objective

and trinocular head

IM-SZ 350-T Same as above mentioned, with

Zoom Objective and trinocular head

#### **Optional Accessories:**

Eyepieces: WF15/15mm, WF20x/10mm (for both models) Auxiliary objectives: 0.5x, 1.5x, 2x (for "SZ" models) Revolver objectives: 1x and 2x, 1x and 3x (for "S" models)



### Stereomicroscope Series IM-S 210



Model IM-S 210 E

This basic, low-cost microscope series, with durable metal stand is perfectly suited for educational and training purpose.

Head: 360° rotating binocular head, inclined 45°,

interpupillary distance 55-75 mm, diopter adjustment

Eyepiece: WF10x/20 mm

Objective: Turret objective (2x/4x)

Magnification: 20x/40x, standard

(with auxiliary accessories max. 5x - 80x)

Working distance: 57 mm

Base/Illumination: without illumination type A,

> type B, with incident light, 12 Volt 10 Watt

with incident and transmitted

light, 12 Volt 10 Watt

with incident LED light

with incident and transmitted LED light

#### **Optional Accessories:**

Auxiliary turret objectives: 1x/2x, 1x/3x Evepieces: WF5x, WF15x, WF20x Darkfield stage C Jewel tweezer

#### Most common configurations:

IM-S 210 "A" (20x/40x magnification; without illumination)

IM-S 210 "E" (20x/40x magnification, with incident

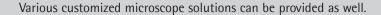
and transmitted LED light)

### Magnification Table

	cation table, x eyepieces	e.g Magnification table, with WF5x eyepieces (optional)		
Turret	Total	Turret	Total	
objective	Magnification	objective	Magnification	
1x/2x	10x/20x	1x/2x	5x/10x	
2x/4x	20x/40x	2x/4x	10x/20	
1x/3x	10x/30x	1x/3x	5x/15x	

## Microscopy accessories available from us:

- Object and cover glasses (slides with cutted or grinded edges, cover glasses)
- Microscopy instruments (e.g. dissecting needles, forceps, scissors, etc.)
- Microscopy instruments sets
- Slide boxes
- Microtomes
- Magnifiers (e.g. hand-held, loup, etc.)
- Calibration slides
- etc.







Calibration slides







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